

3.3 The Trigonometric Functions (odd answers)

$$\begin{array}{ll} 1. \sin \alpha = \frac{4}{5} & \cos \alpha = \frac{3}{5} \\ \tan \alpha = \frac{4}{3} & \sec \alpha = \frac{5}{3} \\ \csc \alpha = \frac{5}{4} & \cot \alpha = \frac{3}{4} \end{array}$$

$$\begin{array}{ll} 3. \cos \alpha = -\frac{3\sqrt{13}}{13} & \sec \alpha = -\frac{\sqrt{13}}{3} \\ \sin \alpha = -\frac{2\sqrt{13}}{13} & \csc \alpha = -\frac{\sqrt{13}}{2} \\ \tan \alpha = \frac{2}{3} & \cot \alpha = \frac{3}{2} \end{array}$$

5. 0

7. undefined

9. $\frac{\sqrt{2}}{2}$

11. -1

13. $-\frac{\sqrt{2}}{2}$

15. $-\frac{\sqrt{3}}{3}$

17. $\sqrt{3}$

19. ≈ 0.9613

21. ≈ 0.2679

23. $-\frac{5}{4}$

25. III

27. 12.6 square meters